

WSDOT Ferries Division Fuel Mitigation Strategies

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Presentation Overview

- Legislative budget provisos
- Fuel cost challenge
- Recommendations for legislative consideration
 - Cost mitigation strategies
 - Revenue enhancement (fuel surcharge)
- Next Steps

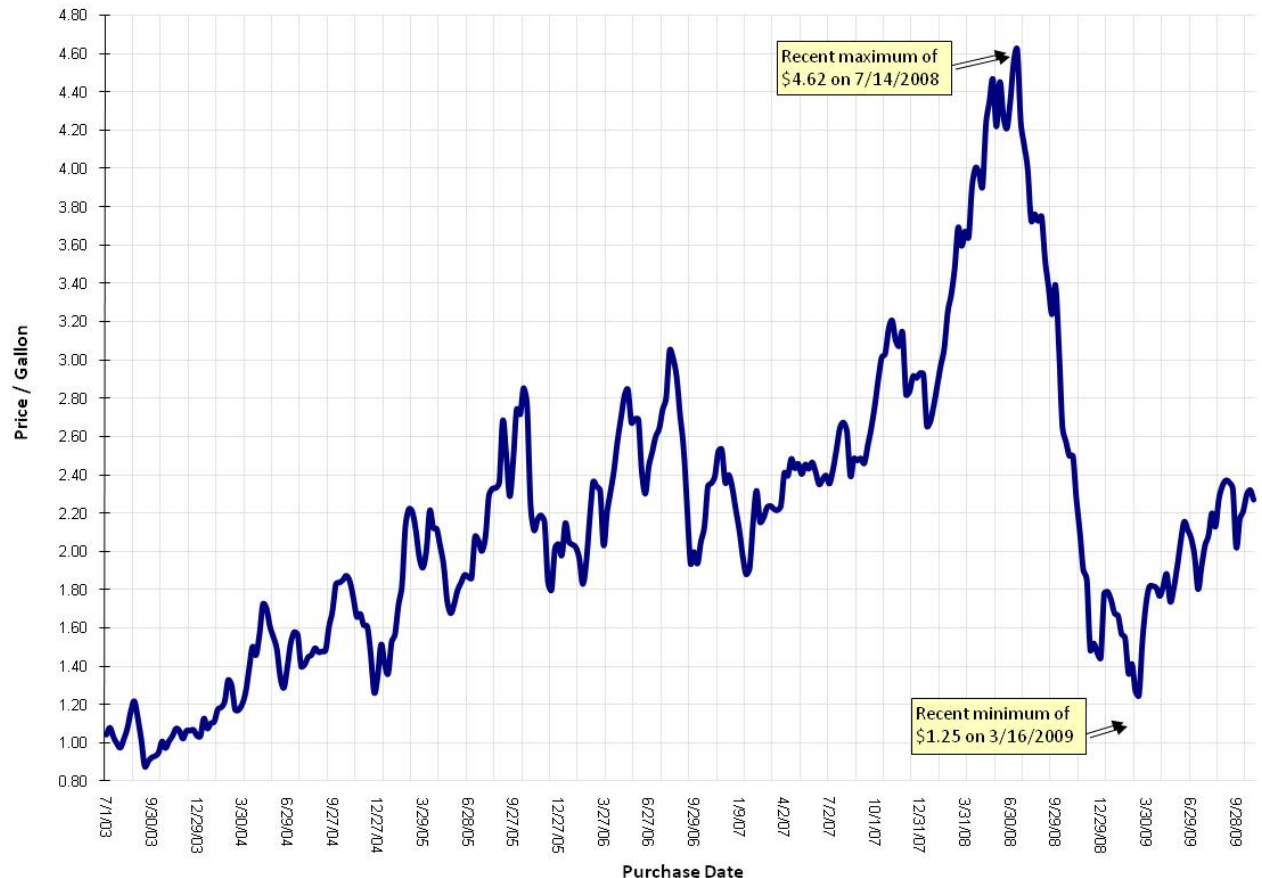
Legislative Provisos

- In the 2009-11 budget, the legislature included two relevant provisos:
 - **For the Department of Transportation – Marine:** If, after the department's review of fares and pricing policies, the department proposes a fuel surcharge, the department must evaluate other cost savings and fuel price stabilization strategies that would be implemented before the imposition of a fuel surcharge.
 - **For the Transportation Commission – Fuel surcharge methodology:** If the commission considers implementing a ferry fuel surcharge, it must first submit an analysis and business plan to the office of financial management and either the joint transportation committee or the transportation committees of the legislature.
- The WSTC Ferry Subcommittee and WSF have collaborated on a joint response that is designed to address strategies for budget risk associated with the volatility of fuel prices.
- Governor's Supplemental Budget proposal includes an assumption that a surcharge mechanism would be available beginning May 1, 2010.

Historical Fuel Price Volatility

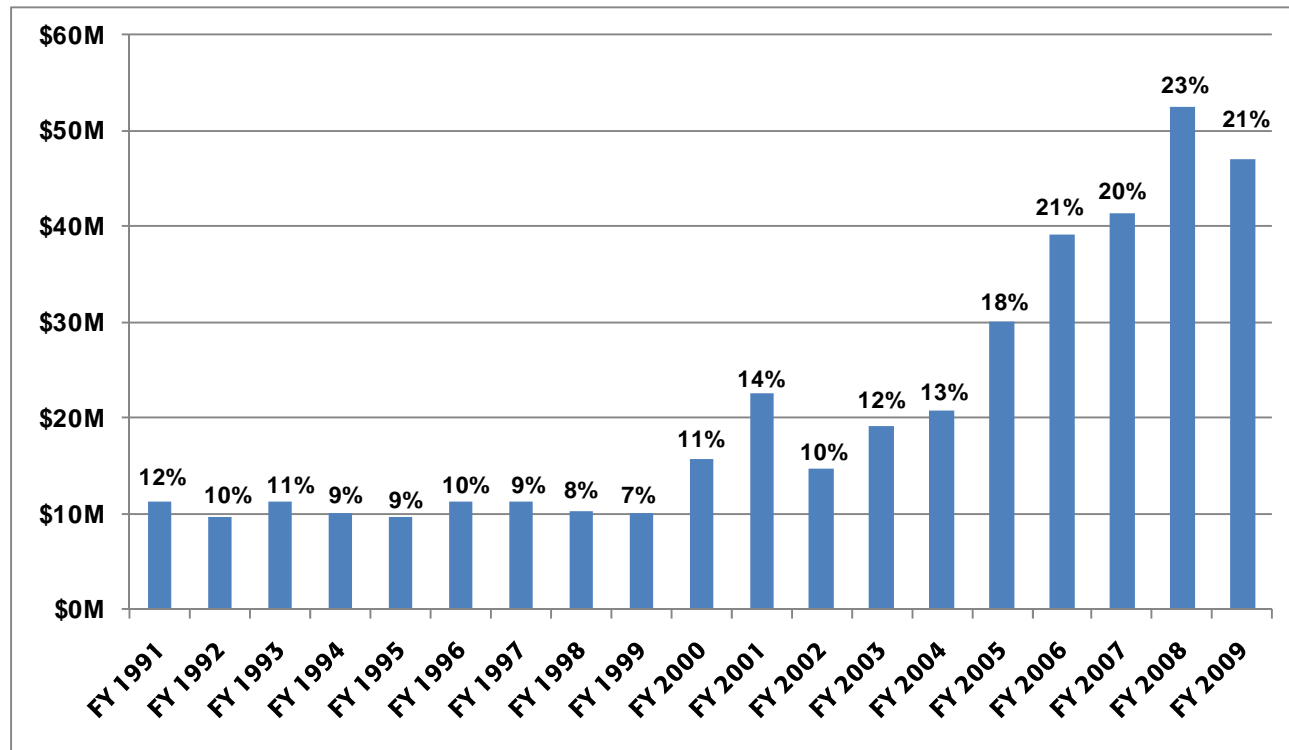
- WSF fuel prices, especially within the last three year have been extremely volatile.
- Most long-term projections of the global fuel market depict fuel prices increasing on average about 2% to 4% per year over the next 15 years.
- Market instability and short-term price fluctuations will be the norm going forward.

WSF FUEL PRICE HISTORY
7-1-2003 to 11-2-2009



Fuel Price Volatility and Budget Risk

- Since 2000, the importance of fuel costs has grown dramatically, accounting for more than 20% of operating costs since FY2006.
- This increase coupled with the price volatility has created a much larger budget risk problem for WSF.



Mitigating Fuel Price Risk

- The key elements of the proposed fuel price mitigation strategy include:
 - **Market exposure risks.** Develop fuel price hedging strategies to manage WSF's exposure to price swings and make budgeting for future fuel costs more predictable.
 - **Conservation.** Continue to implement current fuel efficiency measures and explore new ways to conserve fuel, while maintaining the existing level of service. Fuel conservation strategies may include scenarios that have greater service impacts in periods of significant price increases.
 - **Fuel surcharge.** Implement a fuel surcharge program that is designed to recover a portion of fuel costs that exceed the budgeted base price of fuel.
- The first two elements are cost-related strategies and the third would provide revenue enhancement in times when fuel prices exceed budgetary expectations.

Price Hedging

- Many of the larger transit agencies hedge fuel price risk.
- The Legislature passed House Bill (HB) 2746 during the 2008 legislative session, authorizing WSF to explore and implement fuel purchasing strategies such as price hedging to reduce the overall cost of fuel and mitigate the impact of market price fluctuations.
- Efforts have begun to develop a hedging policy for WSF, identify the most appropriate hedging technique(s), and gather information needed to make a decision on how to proceed with this strategy option.

Budgeting for Fuel Expenditures

- Currently, the legislature uses a single forecast to establish the expected price of fuel, which can move up or down significantly quarter to quarter.
- To minimize the impact of forecast price volatility, suggest modifying fuel budgeting practices so the fuel budget is not based on a single forecast price.
- An alternative would base budgeted fuel price on an average of the four most recent forecasts.
- Average could be weighted to put greater emphasis on the most recent information.
- Less impact from forecasts that turn out to be outliers

2009-11 Budget Proposal

Fuel Forecasts	Weighting		FY 2010	FY 2011
	Factor			
February '08	10%		\$2.10	\$2.20
June '08	15%		\$3.60	\$3.38
September '08	25%		\$3.58	\$3.70
November '08	50%		\$1.95	\$2.45
Weighted Average PPG			\$2.62	\$2.88
Straight Average PPG			\$2.81	\$2.93
<i>*Budget proposal based on Nov. '08 Forecast</i>			\$1.95	\$2.45

2009-11 Adopted Budget

Fuel Forecasts	Weighting		FY 2010	FY 2011
	Factor			
June '08	10%		\$3.60	\$3.38
September '08	15%		\$3.58	\$3.70
November '08	25%		\$1.95	\$2.45
March '09	50%		\$1.30	\$1.66
Weighted Average PPG			\$2.04	\$2.34
Straight Average PPG			\$2.61	\$2.80
<i>*Budget adopted based on Mar. '09 Forecast</i>			\$1.30	\$1.66

2009-11 Supplemental Budget Proposal

Fuel Forecasts	Weighting		FY 2010	FY 2011
	Factor			
March '09	10%		\$1.30	\$1.66
June '09	15%		\$2.10	\$2.20
September '09	25%		\$2.15	\$2.32
November '09	50%		\$2.36	\$2.58
Weighted Average PPG			\$2.16	\$2.37
Straight Average PPG			\$1.98	\$2.19
<i>*Budget proposal based on Nov. '09 Forecast</i>			\$2.36	\$2.58

Conservation Strategies

- WSF has developed a series of strategies designed to minimize fuel consumption, including:

Vessel Class	Fuel Saving Initiative	Predicted Savings
Vessel Specific Strategies		
Jumbo Mark II	Upgrade voltage regulators to run vessels on two engines, without using a third during landings	181,300 gal/year for 3 ferries
Jumbo Mark I	Upgrade control systems to run vessels on 3 engines instead of 4	142,000 gal/year for 2 ferries
Super Class	Upgrade engines and associated systems to enable running on 2 engines instead of 4	387,000 gal/year for 3 ferries
Issaquah Class	Running in split mode	Not yet determined
Systemwide Strategies		
	Develop alternate tie-up method for vessels, allowing a reduction in shaft speed while docked	145,000 gal/year per vessel
	Slow vessels down 0.5 to 1.0 knots	Up to 2.5% savings for 0.5 knot reduction and 5% for 1.0 knot reduction
	Improve loading and unloading times	Not yet determined

Fuel Surcharge Proposal

A fuel surcharge is proposed that:

- Would reduce, but not completely eliminate WSF's exposure to the effects of fuel price volatility.
- Is both transparent and simple to calculate.
- Would be tied to a “base price of fuel” established by the most recent WSF budget, and could be partially or entirely "reset" by subsequent legislative budgetary action via a supplemental appropriation.
- Would be separately identified from regular fares and the revenues would be segregated within the Ferry Operating Account so as to be used solely to defray fuel costs.
- Would be based on monthly indexes of Tacoma and Anacortes diesel fuel price data, weighted according to WSF's purchasing pattern, and would serve as a readily available proxy for fuel costs by month.
- Would be **updated monthly**, where warranted by fuel price changes.
- Would be automatic based on a formula adopted by the Transportation Commission and codified in rule form in the Washington Administrative Code.
- Would be **capped at 20%** regardless of the actual price of fuel.

Surcharge Calculation

- The proposed fuel surcharge methodology would be an automatic process that would determine, based on actual fuel prices and the established base price of fuel, if a surcharge is required and what the surcharge rate would be:

1 Determine Fuel Cost Escalation Factor =

(Average actual price of fuel for the prior month - base price of fuel) ÷ base price of fuel

$$\$2.00 - \$1.66 = \$0.34 \div \$1.66$$

Fuel Cost Escalation Factor = 20.5%

2 Excess Fuel Costs =

Fuel Cost Escalation Factor (from Step 1) x budgeted fuel costs for current fiscal year

$$20.5\% \times \$29,600,000 = \$6,068,000$$

Excess Fuel Costs = \$6,068,000

3 Fuel Surcharge Factor =

Excess Fuel Costs (from Step 2) ÷ budgeted fare revenues for current fiscal year

$$\$6,068,000 \div \$154,369,700 = 3.9\%$$

Fuel Surcharge Factor = 3.9%

- Once a surcharge rate is established, then it would apply to all fare categories and rounded to the nearest nickel.

Implications of a Fuel Surcharge

- To illustrate the potential impact of the proposed surcharge, two scenarios are presented:
 - A base fuel price of \$1.66 per gallon, which is the adopted budget price for fuel in FY 2011.
 - A base fuel price of \$2.15 per gallon, which is the long-term, inflation-adjusted price of diesel fuel for WSF.

Base Price of Fuel equal to \$1.66

		Seattle-Bainbridge Island		Mukilteo-Clinton		Anacortes-Friday Harbor	
Fuel Price	Fuel	Fuel		Fuel		Fuel	
per Gallon	Surcharge	Surcharge	Total Price	Surcharge	Total Price	Surcharge	Total Price
\$1.66	0.0%	\$0.00	\$11.85	\$0.00	\$6.85	\$0.00	\$37.90
\$2.50	9.7%	\$1.15	\$13.00	\$0.65	\$7.50	\$3.70	\$41.60
\$3.00	15.5%	\$1.85	\$13.70	\$1.05	\$7.90	\$5.85	\$43.75
\$3.50	20.0%*	\$2.35	\$14.20	\$1.35	\$8.20	\$7.60	\$45.50

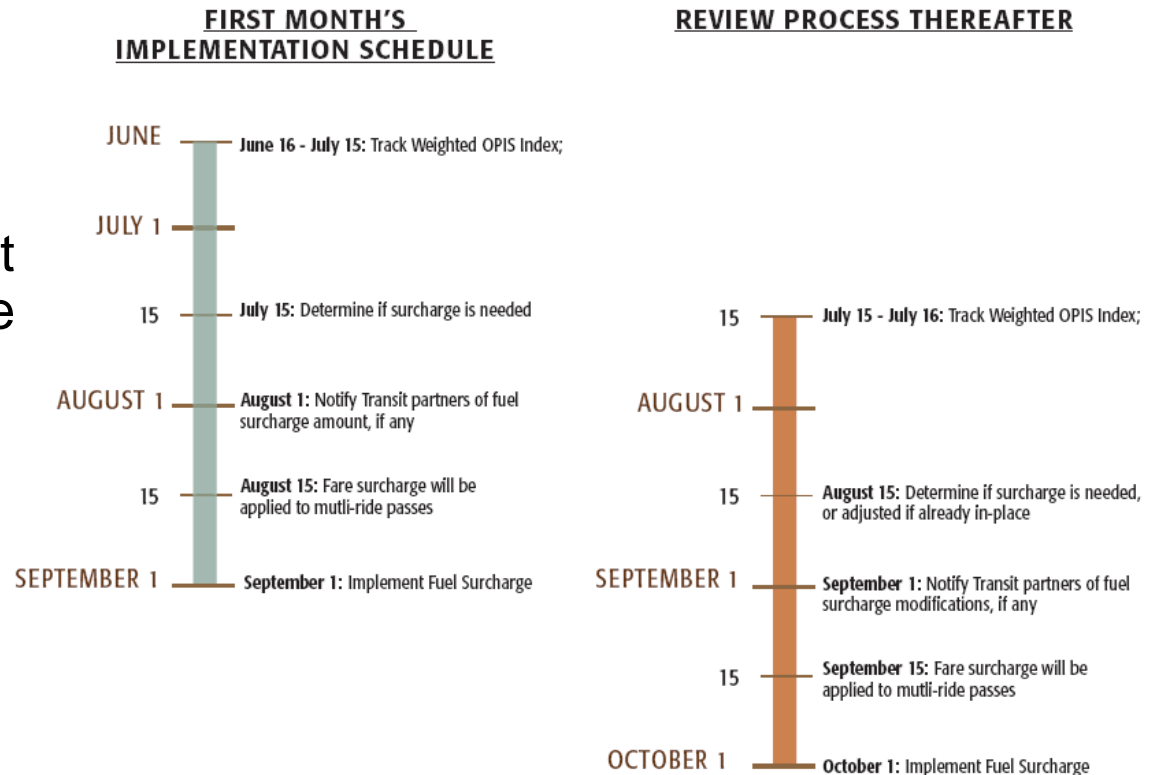
Base Price of Fuel equal to \$2.15

		Seattle-Bainbridge Island		Mukilteo-Clinton		Anacortes-Friday Harbor	
Fuel Price	Fuel	Fuel		Fuel		Fuel	
per Gallon	Surcharge	Surcharge	Total Price	Surcharge	Total Price	Surcharge	Total Price
\$2.15	0.0%	\$0.00	\$11.85	\$0.00	\$6.85	\$0.00	\$37.90
\$2.50	3.1%	\$0.35	\$12.20	\$0.20	\$7.05	\$1.20	\$39.10
\$3.00	7.6%	\$0.90	\$12.75	\$0.50	\$7.35	\$2.85	\$40.75
\$3.50	12.0%	\$1.45	\$13.30	\$0.85	\$7.70	\$4.55	\$42.45

* Fuel prices in this scenario would result in a fuel surcharge of 21.3%, however the fuel surcharge, as proposed, is capped at 20%.

Fuel Price Review & Surcharge Implementation

- WSF would create a regular monthly process to review actual fuel prices and implement the surcharge where price changes would dictate adding, removing or changing the surcharge.
- WSF must implement price changes on the first of the month.
- Based on the notification requirements, the shortest practical lag between price impact and surcharge will be approximately six weeks.
- Propose tracking monthly fuel prices from mid-month to mid-month.



Next Steps

1. Submit the fuel price mitigation business plan to OFM and the House and Senate Transportation Committees for their consideration.
2. To make the fuel surcharge available to the legislature, the Commission needs to start the code reviser process to implement the surcharge rules in the WAC:
 - **By December 23rd**: file the CR101
 - **February 2010**: file the CR102 with the proposed rule language
 - **Feb/March 2010**: Public comments gathered on surcharge rule
 - **Mid-March 2010**: Commission Hearing on proposal
 - **May 1, 2010**: Earliest possible surcharge implementation

Questions?

For more information on the WSDOT Ferries Division
Fuel Mitigation Strategies, please contact:

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